

# TRACE EVIDENCE

*This service is not offered by Idaho State Police Forensic Services*

**Trace Evidence** includes items such as hair, fibers, headlight filaments, paint chips, glass, plastics and any small mutually transferred material. Extra care is needed when packaging trace evidence so that it doesn't get damaged or lost.

**NOTE:** Take care not to contaminate the scene.

## **A. Hairs, Fibers, any small mutually exclusive material:**

1. Package carefully by folding in paper and securing in individual envelopes. Can use sticky side of Post-It to affix hairs and fibers, then fold. Place envelope(s) in an evidence envelope, seal with evidence tape and initial.
2. Collect comparison samples. Collect hair by pulling 12 – 20 hair strands (if pubic, can be cut at skin surface). Package as described above. If trace evidence is a fiber, the comparison sample is the whole garment or cuttings from a rug, upholstery, etc. Package in paper, seal well to prevent contaminating other samples. Use evidence tape and initial the seal.

**B. Paint chips from vehicles:** This is a comparison test. You must submit two samples from both the suspect's and victim's vehicles.

1. Remove all layers of paint by chipping.
2. Package all samples in separate, sealed containers, such as folded papers or small vials placed inside evidence envelopes. Use evidence tape and initial the seal.
3. Label the source of each sample and indicate whether the sample is known (K) or questioned (Q). The (K) Known samples are from the suspect's and victim's vehicles, close to, but not involved in the impact. The (Q) Questioned samples are from the area of transfer on suspect's and victim's vehicle.

**C. Glass and Plastics:** This is a comparison test.

1. Physical Matching of Glass or Plastic Pieces
  - a. Collect all fragments from the scene.
  - b. Collect all possible matching pieces from source(s).
  - c. Package matching and scene fragments separately. Package all samples in such a way as to prevent further breakage. Use an evidence envelope or a box, depending on your sample. If using a box, secure the item inside so it does not slide around.
  - d. Seal outer container using evidence tape and initial the seal. Label the source of each sample.
2. Microscopic fragments (collection and packaging)
  - a. Microscopic size fragments are found mostly in shoes or on clothing. If microscopic fragments are suspected, carefully package the whole item in folded paper, then place inside a well sealed envelope or sack. Tape the corners so no fragments can escape, and label. Be sure to initial the evidence tape.
  - b. Collect comparison glass or plastic from suspected source (broken window, headlight, etc.) Package in paper using sufficient padding to ensure that sharp edges can't poke through the taped edges and to prevent glass fragments from

escaping.

**D. Headlight or Taillight On/Off Filament Examination:** Extra care is required when packaging filament samples.

1. Package the lamp to prevent further damage by either:
  - a. taping inside a padded styrofoam cup and submitting in an evidence bag or box.
  - b. anchoring in a small cardboard box.
  - c. Seal the outer packaging with evidence tape and initial the seal.
2. On taillight assemblies, be sure to submit a sketch indicating which lamp is the turn signal, backup, etc.